Appl. No. 10/502,418

Paper Dated: August 7, 2006

Reply to Office Action of March 7, 2006

Attorney Docket No. 0470-044730

**REMARKS** 

The title has been amended.

The abstract has been amended.

The Examiner has rejected claims 9-10, 13-14, and 16-17 under 35 USC

103(a) over DE 198 10 218 in view of EP 0 952 429. The Examiner states:

As to claims 9-10, DE 198 10 218 ('218) discloses a rotational speed measuring device including K magnetic pole pairs distributed angularly over the rotatable ring, K being an integer greater than one and sensor means positioned relative to the rotatable ring such that a varying magnetic field detected by the sensor means, the sensor means comprising at least a first pair of magnetic sensors SE1, SE2, the first pair of magnetic sensors being positioned 2πL/K radians apart from each other, L being an integer between 1 and K-1 (note fig. 17). '218 fails to show a second pair of magnetic sensors. '429 is cited to show this feature. '429 teaches to use a second pair of sensors in a rotational motion detector to reduce output signal jitter (note e.g. figs. 1-3, claim 1). Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of '218 to have included a second pair of sensors as taught by '429 to reduce jitter in the output signal.

As to claims 13-14, '429 discloses summation and subtraction of output signals from the sensors (fig. 3).

As to claims 16-17, the use of rotation speed sensors having integrated signal processing means is well known in the art.

Reconsideration is respectfully requested

Claim 9, the only independent claim in the application, provides that the sensors in a first pair of sensors are spaced apart  $2\pi L/K$  radians apart such that both sensors

would be sensing the transition from N to S at the same instant. The sensors in a second pair

of sensors are spaced apart  $2\pi M/K$  radians apart and are spaced relative to the first pair of

sensors so that when the first pair is sensing transitions from N to S the second pair is sensing

transitions from S to N.

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The secondary reference, EP '429 discloses two pairs of sensors, namely A and A' and B and B'. However, the spacing between sensors in a pair and the spacing between the two pairs is not as required by the language of claim 9. When sensor A is at the black to white transition, sensor A' is at the white to black transition. At that instant, sensor

B is at the peak of the white, sensor B' is at the peak of the black.

Even if there existed a suggestion to combine the references, the combination would not be according to the language of claim 9. Further modification not suggested in the art of record would be required. The subject matter of claim 9 is not suggested by the primary and secondary references taken together and therefore the subject matter of claim 9 would not have been obvious to those of ordinary skill in the art.

For the reason claim 9 is not obvious, the remaining claims, all dependent on claim 9, are also allowable.

In view of the forgoing Remarks and Amendments it is respectfully urged that this application is now in condition for allowance.

Respectfully submitted,

THE WEBB LAW FIRM

Bv

David C. Hanson

Registration No. 23,024 Attorney for Applicants

700 Koppers Building

436 Seventh Avenue

Pittsburgh, Pennsylvania 15219

Telephone: 412-471-8815

Facsimile: 412-471-4094